

Department of Library and Information Science



Syllabus for Ph.D. Course Work

2026-27



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SYLLABUS FOR DOCTOR OF PHILOSOPHY (Ph.D.) COURSE WORK**Scheme of Ph.D. Course Work Papers**

Paper No.	Subject	Teaching Hours	Internal Assessment Marks	Examination Marks	Credits	Duration	Total Marks
I	Research Methodology	60	25	75	04	3 Hours	100
II	Research Tools, Statistics & Data Analysis	60	25	75	04	3 Hours	100
III	Research and Publication Ethics	30	10	40	02	2 Hours	50
IV	Opt. any one of the following:						
IV(a)	Education for Library and Information Science	60	25	75	04	3 Hours	100
IV(b)	Scholarly Communication & Research Evaluation	60	25	75	04	3 Hours	100
IV(c)	University and College Library System	60	25	75	04	3 Hours	100
IV(d)	Library Planning and Management	60	25	75	04	3 Hours	100
IV (e)	Digital Library Management System	60	25	75	04	3 Hours	100
IV (f)	Digital Archive Management System	60	25	75	04	3 Hours	100
Total Credits: 14				Total Marks: 350			

Course - I: Research Methodology

Course Title & Code	Credits	Credit Distribution			Teaching Hours	Internal Marks	Exam Marks	Total Marks
		Lecture	Tutorial	Practical/ Practice				
Course - I: Research Methodology	4	3	1	0	60 Hours	25	75	100

Course Outcomes:

Upon completion, scholars will master advanced research design, systematic literature reviews and LIS-specific methodologies. They will achieve proficiency in multivariate statistics, qualitative analysis, and data visualization, while ensuring academic integrity and professional thesis construction using modern AI and international citation standards.

Unit–1: Foundations of Research and Research Design (15 Hours)

- Identification and Formulation of Research Problem
- Types of Research Design: Exploratory, Descriptive, Experimental
- Review of Literature: Principles, Forms, Types, Tools including AI-based
- Systematic Literature Review: PRISMA, and SALSA
- Hypothesis Formulation and Testing

Unit–2: Research Methods and Techniques in LIS (20 Hours)

- Quantitative, Qualitative, and Mixed-Methods of Research
- Domain-Specific Research Methods in LIS
- Sampling Techniques and Research Populations
- Data Collection Methods: Questionnaire Design, Interview Techniques,
- Observation Methods and Content Analysis
- Use of Library Records, Institutional Repositories, and Archival Data
- Metric Studies in LIS: Bibliometrics, Scientometrics, Informetrics, Webometrics, Altmetrics

Unit–3: Data Analysis, Interpretation, and Visualization (15 Hours)

- Data Preparation, Coding, and Cleaning
- Descriptive and Inferential Statistics
- Multivariate Analysis Techniques
- Qualitative Data Analysis: Thematic Analysis, Grounded Theory, Narrative Analysis
- Data Visualization and Research Dashboards
- Interpretation of Results and Drawing Valid Conclusions

Unit–4: Research Writing and Management (10 Hours)

- Structure and Components of a Thesis
- Academic Writing Styles and Argumentation
- Style Manuals: APA, MLA, Chicago, and Online Indian Citation
- Academic Integrity, Plagiarism, AI Text and Use of Plagiarism Detection Tools

Essential Readings:

- AMERICAN PSYCHOLOGICAL ASSOCIATION. *Publication manual of the American Psychological Association*. Ed. 7. American Psychological Association. 2020.
- BUSHA (C) and HARTER (SP). *Research methods in librarianship: techniques and interpretation*. Orlando, Academic Press. 1980.
- CRESWELL (J W) and CRESWELL (J D). *Research design: Qualitative, quantitative, and mixed methods approaches*. Ed.6, Thousand Oaks, Sage Publications, 2022.
- GOODE (WJ) and HATT (PK). *Methods in social science research*. Asia Law House, New Delhi. 2025.
- KOTHARI (C R) and GARG (G). *Research methodology: Methods and techniques*. Ed.5. New Age International, New Delhi, 2025.
- KUMAR (R). *Research methodology: Step-by-step guide for beginners*. Sage Publications, New Delhi, 2011.
- YOUNG (PV). *Scientific social surveys and research*. Prentice Hall of India, New Delhi, 2012.

Suggested Readings:

- BRYMAN (A). *Social research methods*. 5th ed. Oxford, Oxford University Press. 2016.
- GORMAN (GE) and CLAYTON (P). *Qualitative research for the information professional: A practical handbook*. 2nd ed. London, Facet Publishing. 2005.
- HEALY (K). *Data visualization: A practical introduction*. Princeton, Princeton University Press. 2018.
- LINE (MB). *Library surveys: An introduction to the use, online and procedure of survey and methods of survey of libraries*. 2nd ed. London, Bingley. 1982.
- MODERN LANGUAGE ASSOCIATION. *MLA handbook*. Ed. 9. Modern Language Association of America. 2021.
- PICKARD (AJ). *Research methods in information*. 3rd ed. London, Facet Publishing. 2017.
- REVELLE (A). *Preparing the data: data analysis for the library and information professional*. Chicago, ALA Editions. 2010.
- TAN (W). *Research methods: A practical guide for students and researchers*. Ed.2. World Scientific, Singapore, 2022.
- WALLIMAN (N). *Research methods: the basics*. 2nd ed. London, Routledge. 2021.

Course - II: Research Tools, Statistics & Data Analysis

Course Title & Code	Credits	Credit Distribution			Teaching Hours	Internal Marks	Exam Marks	Total Marks
		Lecture	Tutorial	Practical/ Practice				
Course - II: Research Tools, Statistics & Data Analysis	4	3	1	0	60 Hours	25	75	100

Course Outcomes:

Upon completion, scholars will demonstrate proficiency in applying descriptive and inferential statistics, including parametric and non-parametric tests. They will master data analysis software like SPSS, R, and VOSviewer, alongside bibliometric laws and web-based research tools. Students will effectively interpret complex outputs for high-quality research reporting and management.

Unit-1: Descriptive & Inferential Statistics (15 Hours)

- Descriptive and Inferential statistics: Central tendency, dispersion, correlation, and regression analysis
- Parametric tests: t-test, ANOVA, ACNOVA, Factor Analysis
- Non-parametric tests: Chi-square, Mann-Whitney, Kruskal-Wallis
- Selection of appropriate statistical tests for LIS research problems

Unit-2: Data Analysis Software & Visualization Tools (20 Hours)

- Spreadsheets: Data entry, coding, tabulation and basic analysis
- Conceptual use of SPSS/STATA and R: Data entry, cleaning, transformation, generating statistical outputs
- Data visualization: Tables, charts, graphs, reporting standards
- Interpretation of statistical output for thesis and research papers

Unit-3: Bibliometrics and Citation Analysis (15 Hours)

- Bibliometric laws: Bradford, Lotka, Zipf
- Citation analysis tools: VOSviewer, Biblioshiny (Bibliometrix)

Unit-4 Web-Based Research Tools (10 Hours)

- Web-based research and statistical tools: Online analytics and easy-calculation tools
- Altmetrics.com, SurveyMonkey, Google Form
- Research data management tools and practices

Essential Readings:

ALEXANDER (L) and COLEMAN (T). *Statistics for librarians*. London, Facet Publishing. 2016.

CENTRE FOR SCIENCE AND TECHNOLOGY STUDIES, LEIDEN UNIVERSITY.VOSviewer. <https://www.vosviewer.com/>

CRONIN (B) and SUGIMOTO (CR), Ed. *Beyond bibliometrics: harnessing multidimensional indicators of scholarly impact*. Cambridge, MIT Press. 2014.

DEPT OF ECONOMICS AND STATISTICS UNIVERSITY OF NAPLES FEDERICO.Bibliometrix: The complete science mapping platform.<https://www.bibliometrix.org/>

FIELD (A). *Discovering statistics using IBM SPSS statistics*. 5th ed. London, Sage Publications. 2017.

GUPTA (SC) and KAPOOR (VK). *Fundamentals of mathematical statistics*. 12th ed. New Delhi, Sultan Chand & Sons. 2020.

VENABLES (WN) and SMITH (DM). *An introduction to R. (Manual)*,2026.<https://cran.r-project.org/doc/manuals/R-intro.pdf>

Suggested Readings:

ATMETRICS. <https://www.altmetric.com/>

CENTRE FOR SCIENCE AND TECHNOLOGY STUDIES, LEIDEN UNIVERSITY.VOSviewer. <https://www.vosviewer.com/>

CONNAWAY (LS) and RADFORD (ML). *Research methods in library and information science*. 6th ed. Santa Barbara, Libraries Unlimited. 2016.

REVELLE (A). *Preparing the data: data analysis for the library and information professional*. Chicago, ALA Editions. 2010.

SIEGEL (A) and WAGNER (S). *Practical business statistics*. 8th ed. Cambridge, Academic Press. 2022.

VENABLES (WN) and SMITH (DM). *An introduction to R. Network Theory*, 2008.

Course - III: Research and Publication Ethics

Course Title & Code	Credits	Credit Distribution			Teaching Hours	Internal Marks	Exam Marks	Total Marks
		Lecture	Tutorial	Practical/ Practice				
Course - III: Research and Publication Ethics	2	1	0	1	30 Hours	10	40	50

Course Outcomes:

After completion of the course, students will be able to understand the philosophy of science and ethics, research integrity, and publication ethics. They will gain hands-on experience to identify and avoid research misconduct and predatory publications, and understand the use of indexing/citation databases, open access initiatives, research metrics, and plagiarism detection tools.

Part I: Theory

RPE 01: Philosophy and Ethics (4 Hours)

- Introduction to Philosophy: Definition, nature, scope, concepts, and branches.
- Ethics: Definition, moral philosophy, nature of moral judgements, and reactions.

RPE 02: Scientific Conduct (4 Hours)

- Ethics with respect to science and research.
- Intellectual honesty and research integrity.
- Scientific Misconducts: Falsification, Fabrication, and Plagiarism (FFP).
- Redundant Publications: Duplicate and overlapping publications, salami slicing.
- Selective reporting and misrepresentation of data.

RPE 03: Publication Ethics (7 Hours)

- Publication Ethics: Definition, introduction, and importance.
- Best Practices / Standards Setting Initiatives: Guidelines by COPE (Committee on Publication Ethics), WAME (World Association of Medical Editors), etc.
- Publication Misconduct: Definition, concept, types, and problems that lead to unethical behavior and vice-versa.
- Violation of publication ethics, authorship, and contributorship.
- Conflicts of interest.
- Identification of publication misconduct, complaints, and appeals.
- Predatory publishers and journals.

Part II: Practice

RPE 04: Open Access Publishing (4 Hours)

- Open access publications and initiatives.
- SHERPA/RoMEO: Online resources to check publisher copyright and self-archiving policies.
- Software Tool / Website: UGC-CARE website to identify predatory publications (developed by Savitribai Phule Pune University - SPPU).

- Journal Finder / Journal Suggestion Tools: JANE, Elsevier Journal Finder, Springer Journal Suggester, etc.

RPE 05: Publication Misconduct**(4 Hours)****A. Group Discussions:**

- Subject-specific ethical issues, FFP, and authorship.
- Conflicts of interest.
- Complaints and appeals: Examples and fraud cases from India and abroad.

B. Software Tools:

- Use of plagiarism detection software like Turnitin, Urkund (Ouriginal), and other open-source software tools.

RPE 06: Databases and Research Metrics**(7 Hours)****A. Databases:**

- Indexing databases.
- Citation databases: Web of Science, Scopus, etc.

B. Research Metrics:

- Impact Factor of journals as per Journal Citation Report (JCR), SNIP, SJR, IPP, and CiteScore.
- **Metrics:** h-index, g-index, i10 index, and Altmetrics.

Essential Readings:

AHUJA (VK) and BAISHYA (K). Ed. *Research and Publication Ethics*. National Law University and Judicial Academy, Assam, Guwahati. 2024.

BOS (J). *Research Ethics for Students in the Social Sciences*. 1st ed. Springer International Publishing, Cham. 2020.

MURLIDHAR (K), GHOSH (A) and SINGHVI (AK) Ed. *Ethics in Science Education , Research and Governance*. New Delhi: Indian National Science Academy. 2019.
https://www.insaindia.res.in/pdf/Ethics_Book.pdf

OLIVER (P). *The Student's Guide to Research Ethics*. 2nd ed. Open University Press, Maidenhead. 2023.

RESNIK (DB). *What is Ethics in Research and Why it is Important*. National Institute of Environmental Health Sciences. 1-10. 2011.
<https://www.niehs.nih.gov/research/resources/bioethics/whatis/index.cfm>

SINGH (UP), AHLAWAT (S) and SHARMA (S). *Research and Publication Ethics*. Sultan Chand & Sons, New Delhi. 2023.

UNIVERSITY GRANTS COMMISSION. *Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions Regulations*. University Grants Commission, New Delhi. 2018.
https://www.ugc.gov.in/pdfnews/7771545_academic-integrity-Regulation2018.pdf

Suggested Readings:

ALASUUTARI (P) and Others. Eds. *The Sage Handbook of Social Research Methods*. Sage Publications. 2008.

<https://arunodayauniversity.ac.in/wp-content/uploads/2025/01/The-SAGE-Handbook-of-Social-Research-Methods-Sage.pdf>

Elsevier. *Ethics in Research and Publications*.

https://researcheracademy.elsevier.com/uploads/201802/ethics_a5_booklet_update260617_web.pdf

PULIDO (MP). *Ethics Management in Libraries and Other Information Services*. Chandos Publishing. 2017.

STENECK (NH). *Introduction to the Responsible Conduct of Research*. Office of Research Integrity, Washington, DC. 2007.

SHAMOO (AE) and RESNIK (DB). *Responsible Conduct of Research*. Ed. 3. Oxford University Press, New York. 2015.

VERMA (V) and Others. *Textbook on Research and Publication Ethics*. 1st ed. Jaya Publishing House, New Delhi. 2022.

Course – IV (a): Education for Library and Information Science

Course Title & Code	Credits	Credit Distribution			Teaching Hours	Internal Marks	Exam Marks	Total Marks
		Lecture	Tutorial	Practical/ Practice				
Course-IV(a): Education for Library and Information Science	4	3	1	0	60 Hours	25	75	100

Course Outcomes:

Upon completion, scholars will understand the historical evolution and sociological perspectives of LIS education. They will master curriculum design, accreditation standards, and pedagogical methods. Additionally, they will identify core professional competencies and the role of institutional frameworks in fostering continuing education and faculty development.

Unit -1: Historical Development

(15 Hours)

- Library and information science education: Sociological perspective
- Growth and development of LIS education: Pre and Post Independence
- Changing dimensions in Libraries and its implications on library and information science education
- Accreditation and Quality Control of LIS Education
- Role of University of Delhi in LIS education

Unit -2: Professional Development

(15 Hours)

- Categories and levels of library and information professional
- Qualifications, skills and competencies requirements
- Continuing education programme for library and information professionals

Unit -3: Level of Courses and Curriculum

(15 Hours)

- Levels of courses in education for librarianship
- Library and information science curriculum: Model Curriculum of LIS education
- Trends in LIS education

Unit -4: Methods of Teaching and Evaluation

(15 Hours)

- Teaching and learning Methods
- Assessment and evaluation
- Faculty development

Essential Readings:

KAULA (PN). *Library and information science education in India*. New Delhi, Concept Publishing Company. 1992.

MANGLA (PB). *Library and information science education in India: trends and issues*. New Delhi, Macmillan India. 1981.

SINGH (KP). *Library and information science education and research in India*. Delhi. Excel India Publishers. 2026.

SINGH (KP). *LIS Education: Pragmatic paradigm shift*. New Delhi: Today & Tomorrow's Printers and Publishers, 2021.

Suggested Readings:

INTERNATIONAL FEDERATION OF LIBRARY ASSOCIATIONS AND INSTITUTIONS. *Guidelines for professional library/information educational programs*. The Hague, IFLA. 2001.

INTERNATIONAL FEDERATION OF LIBRARY ASSOCIATIONS AND INSTITUTIONS. *Global Library and Information Science – a Textbook for Students and Educators*, De Gruyter Saur, 2009.

SINGH (KP). *80 Years of Legacy, Leadership and Learning: Library and Information Science Department of Delhi University*. Delhi: Excel India Publishers, 2026.

Course – IV (b): Scholarly Communication and Research Evaluation

Course Title & Code	Credits	Credit Distribution			Teaching Hours	Internal Marks	Exam Marks	Total Marks
		Lecture	Tutorial	Practical/ Practice				
Course-IV(b): Scholarly Communication and Research Evaluation	4	3	1	0	60 Hours	25	75	100

Course Outcomes:

Upon completion, scholars will master the scholarly communication lifecycle, including digital publishing and diverse peer review models. They will gain expertise in Open Science principles, OA models, and copyright. Additionally, they will apply responsible metrics (impact factors, h-index) and altmetrics to enhance research visibility and impact evaluation.

Unit-1: Evolution of Scholarly Communication (15 Hours)

- Scholarly communication lifecycle: creation, evaluation, dissemination and preservation
- Evolution from print to digital and platform-based publishing
- Role of publishers, scholarly societies and academic institutions
- Peer review models: single-blind, double-blind, open and post-publication review
- Emergence of preprints and early research sharing

Unit-2: Open Science and Open Access Publishing (15 Hours)

- Open Science principles and components
- Open Access models: Gold, Green, Hybrid and Diamond
- Transformative agreements and institutional OA policies
- Copyright, licensing and author rights (Creative Commons overview)
- Research transparency, reproducibility and open research practices

Unit-3: Research Evaluation and Responsible Metrics (15 Hours)

- Purpose and evolution of research evaluation
- Journal-level metrics: Impact Factor, SJR, SNIP - interpretation and limitations
- Author- and article-level metrics: citations, h-index, g-index
- Research assessment exercises: national and international approaches
- Responsible use of metrics, misuse of indicators and qualitative assessment

Unit-4: Research Dissemination, Visibility and Altmetrics (15 Hours)

- Research dissemination strategies and scholarly visibility
- Preprints, postprints and data publishing
- Institutional repositories and academic social networks
- Altmetrics: concepts, tools and interpretation
- Role of social media and science communication in research impact

Essential Readings:

- ASSOCIATION OF COLLEGE AND RESEARCH LIBRARIES. *Scholarly Communication Toolkit: Scholarly Communication Overview*, Accessed on 12/05/2026, <https://acrl.libguides.com/scholcomm/toolkit>
- CRONIN (B) and SUGIMOTO (CR), Ed. *Scholarly metrics under the microscope: from citation analysis to academic auditing*. Medford, Information Today. 2015.
- DAS, (Anup Kumar). *Scholarly Communications* , Accessed on 12/05/2026, <https://unesdoc.unesco.org/ark:/48223/pf0000231938>
- EUROPEAN COMMISSION. *Next-generation metrics: Responsible metrics and evaluation for open science: Report of the European Commission Expert Group on Altmetrics*, https://eprints.whiterose.ac.uk/id/eprint/113919/1/Next_Generation_Metrics.pdf
- Matthew B. Hoy and Tara J. Brigham, Column Eds. *An introduction to Altmetrics. Medical Reference Services Quarterly*, 33 (4): 2014: <https://www.tandfonline.com/doi/full/10.1080/02763869.2014.957093>
- TIM(C.E. Engels) and KULCZYCKI(Emanuel). *Handbook on Research Assessment in the Social Sciences*. Edward Elgar Publishing Limited, 2022 <https://www.elgaronline.com/edcollbook/edcoll/9781800372542/9781800372542.xml>

Suggested Readings:

- BORGMAN (CL). *Scholarship in the digital age: information, infrastructure, and the internet*. Cambridge, MIT Press. 2007.
- DE BELLIS (N). *Bibliometrics and citation analysis: from the Science Citation Index to cybermetrics*. Lanham, Scarecrow Press. 2009.
- MA (L). *The scholarly communication handbook: from research dissemination to societal impact*. London, Facet Publishing. 2023.
- MOED (HF). *Citation analysis in research evaluation*. Dordrecht, Springer. 2005.
- SUBER (P). *Open access*. Cambridge, MIT Press. 2012.
- TATTERSALL (A), Ed. *Altmetrics: a practical guide for librarians, researchers and publishers*. London, Facet Publishing. 2016.

Course – IV (c): University and College Library System

Course Title & Code	Credits	Credit Distribution			Teaching Hours	Internal Marks	Exam Marks	Total Marks
		Lecture	Tutorial	Practical/ Practice				
Course-IV(c): University and College Library System	4	3	1	0	60 Hours	25	75	100

Course Outcomes:

Upon completion, scholars will evaluate the historical growth and governance of academic library systems. They will master human resource and financial management, alongside strategic collection development. Additionally, they will gain expertise in leveraging ICT applications, library networks like INFLIBNET, and consortia to enhance services within digital and hybrid environments.

Unit-1: Growth and Development

(15 Hours)

- Historical development of university and college libraries.
- Higher Education System and its impact on the development of University and College Libraries.
- Distance and Open Universities and implications for library services.
- Study of University and College libraries of Selected Developed and Developing countries.

Unit-2: Library Governance and Organization

(15 Hours)

- Library Governance
- Library Committee: Constitution, Powers and Functions
- Organizational pattern: Library System, Structure and Services

Unit-3: Human Resource, Financial and Collection Management

(15 Hours)

- Human resource management in academic libraries: Staffing, training, performance appraisal
- Financial Management: Budgeting, costing, cost–benefit and cost-effectiveness studies
- Collection Development and Access Management in libraries: Policies, resource sharing, usage and evaluation studies

Unit-4: Networks, Consortia and ICT Applications

(15 Hours)

- Library networks with special reference to INFLIBNET
- Library Consortia and ONOS
- Library services in print, digital and hybrid environments: evaluation and effectiveness
- Application of ICT in academic libraries
- Planning, innovation and future development of university and college libraries

Essential Readings:

- AGGARWAL (DS). *Management of academic libraries in the digital era*. New Delhi, Ess Ess Publications. 2015.
- BHATT (RK) and others. *Academic Libraries*. Delhi, KK Publications. 2018.
- BHATT (RK). *University Libraries*. Delhi, Narendra Publishing House. 2019.
- BROPHY (P). *The academic library*. London, Library Association. 2000.
- BUDD (JM). *The academic library: the context, its purpose and its operation*. London, Libraries Unlimited. 1988.
- RANGANATHAN (SR). *School and college libraries*. Madras, Madras Library Association. 1942.
- SHARMA (JP). *Academic libraries in India: emerging trends and challenges*. New Delhi, Chand Publications. 2016.

Suggested Readings:

- BAKER (D), ed. *Resource management in academic libraries*. London, Library Association. 1997.
- CHAPMAN (L). *Managing acquisitions in library and information services*. London, Library Association. 2001.
- GUPTA (DK). *Library networks and resource sharing in India*. Munich, K. G. Saur. 2009.

Course – IV (d): Library Planning and Management

Course Title & Code	Credits	Credit Distribution			Teaching Hours	Internal Marks	Exam Marks	Total Marks
		Lecture	Tutorial	Practical/ Practice				
Course-IV(d): Library Planning and Management	4	3	1	0	60 Hours	25	75	100

Course Outcomes:

Upon completion, scholars will master strategic planning, organizational structures, and functional space management for modern libraries. They will gain expertise in personnel management, leadership models, and TQM. Additionally, they will apply financial budgeting, systems analysis techniques like PERT/CPM, and data-driven library analytics to evaluate service effectiveness.

Unit-1: Planning and Organizational Structure (15 Hours)

- Planning Methodology: Strategic, tactical, and operational planning in library systems
- Organization Structures: Hierarchical, matrix, and team-based structures in modern libraries
- Government of the Library: Governance frameworks, library committees, and authority structures
- Library Buildings and Space Management: Standards and Guidelines for library building and Planning for functional and modular library layouts for different types of libraries

Unit-2: Personnel Management and Staff Development (15 Hours)

- Personnel Management: Job analysis, job description, Division of Work in libraries and recruitment procedures for LIS professionals
- Leadership and Decision Making: Decision Support system, Problem-solving techniques and decision-making models in LIS
- Team Management, Communication and Conflict Management: Formal and informal communication channels and resolution strategies
- Total Quality Management (TQM) and Change Management: Implementing quality standards and navigating transitions
- LIS Standard and Guidelines for Staffing, Manpower Planning, Staff Development and Performance Appraisal methods

Unit-3: Finance Management in Libraries (15 Hours)

- Financial Management: Sources of finance, Resource mobilization and Fund raising for libraries
- Budgeting techniques and Accounting methods adopted in libraries
- Financial auditing methods in libraries
- Library Statistics
- Economics of Information: Cost-benefit analysis and cost-effectiveness in library operations

Unit-4: Systems Analysis, and Evaluation**(15 Hours)**

- Systems Study Techniques: Application of PERT/CPM, SWOT/SWOC analysis, and workflow mapping in libraries
- Evaluation of Procedures and Services: Time and motion studies, performance testing, Formulas and Norms Suggested by S. R. Ranganathan and
- Library Analytics: Data-driven management and performance indicators for library impact assessment and user satisfaction audits

Essential Readings:

COHEN (AH). *Library space planning and design: Best practices and case studies from special, academic, and rare book libraries*. Chandos Pub., 2025

EVANS (GE) and ALIRE (CA). *Management basics for information professionals*. 3rd ed. Chicago, ALA Editions. 2013.

MARTIN (MS) Ed. *Financial planning for libraries*. Routledge, 2021.

1MITTAL (RL). *Library administration: theory and practice*. Edn 5. New Delhi, Ess Ess Pub., 2007.

SHARMA (AK). *Library Planning and Management*. Larsen & Keller. 2019.

STUEART (RD) and MORAN (BB). *Library and information center management*. 9th ed. Littleton, Libraries Unlimited. 2017.

Suggested Readings:

DRUCKER (PF). *Management: tasks, responsibilities, practices*. New York, Harper & Row. 1973.

KOONTZ (H) and WEHRICH (H). *Essentials of management: an international, innovation, and leadership perspective*. 10th ed. New York, McGraw-Hill. 2015.

SCHLIPF (F). *Constructing library buildings that work*. American Library Association. 2020.

STOKES (A). *Financial management for libraries and information services*. London, IFLA. 2004.

STONER (JA), FREEMAN (RE), and GILBERT (DR). *Management*. 6th ed. New Delhi, Pearson Education. 2018.

Course – IV (e): Digital Library Management System

Course Title & Code	Credits	Credit Distribution			Teaching Hours	Internal Marks	Exam Marks	Total Marks
		Lecture	Tutorial	Practical/ Practice				
Course-IV(e): Digital Library Management System	4	3	1	0	60 Hours	25	75	100

Course Outcomes:

Upon successful completion of this course, the scholars will gain knowledge about the Digital Libraries and its architecture along with national and international initiatives. In addition, they will learn about digitization workflows, metadata standards, interoperability protocols, preservation strategies, etc which will help them to practically implement the concept while working with the libraries. Further, this course will enhance their skills to evaluate the digital system and its performance through usability metrics and impact assessment.

Unit-1: Foundations and Architecture

(15 Hours)

- Digital Library (DL): Concept, need, characteristics, and evolution
- Digital Library Architecture and 5S Framework
- Planning, design, implementation, evaluation and management of DL
- Digital Library Initiatives: National (NDLI, TKDL) and International (World Digital Library, *Europeana*, DPLA)

Unit-2: Digitization and Standards

(15 Hours)

- Digitization: concept, need and methods
- File formats, tools and digitization workflow
- Compression: types and methods
- Metadata Types and Standards: Dublin Core, METS, MODS, PREMIS

Unit-3: Design and Development of Digital Libraries

(20 Hours)

- DL software: Greenstone Digital Library Software (GSDL), Dspace
- DL hardware: input capture devices: scanners, digital cameras
- Institutional Repositories (IR): Design, development, and policy formulation for scholarly communication
- Interoperability Standards: OAI-PMH (Metadata Harvesting), Z39.50, and SRU/SRW
- Digital Preservation: Long-term strategies including migration, emulation, and bit-preservation

Unit-4: Evaluation and Quality Metrics

(10 Hours)

- Methods of Evaluation of DLs
- Usability and User Experience (UX)
- Performance Metrics
- Impact Assessment

Essential Readings:

- ARMS (WY). *Digital libraries*. Cambridge, MIT Press. 2001.
- CHOWDHURY (GG) and CHOWDHURY (S). *Introduction to Digital Libraries*. Facet Publishing. 2003.
- LESK (M). *Understanding digital libraries*. 2nd ed. San Francisco, Morgan Kaufmann. 2004.
- SCHUBERT (F) and CHOWDHURY (GG). *Digital libraries and information access: Research Perspectives*. London, 2012.
- TEDD (LA) and LARGE (JA). *Digital Libraries: Principles and practice in a global environment*. Walter de Gruyter. 2005.
- WITTEN (IH), BAINBRIDGE (D) and NICHOLS (DM). *How to build a digital library*. Morgan Kaufmann. 2010.
- ALBERT (B) and TULLIS (T). *Measuring the User Experience: Collecting, Analyzing, and Presenting UX Metrics (Interactive Technologies)*. 3rd ed. Morgan Kaufmann. 2022.
- O'Dwyer (A), Dobрева (M) and Feliciat (P). *User Studies for Digital Library Development*. Facet Publishing. 2012.

Suggested Readings:

- CALHOUN (K). *Exploring digital libraries: Foundations, resources, and futures*. London, Facet Publishing. 2017.
- CHOWDHURY (GG) and CHOWDHURY (S). *Information Users and Usability in the Digital Age*. Facet Publishing. 2011.
- XIE (I) and MATUSIAK (KK). *Discover digital libraries: theory and practice*. Elsevier. 2016.

Course – IV (f): Digital Archive Management System

Course Title & Code	Credits	Credit Distribution			Teaching Hours	Internal Marks	Exam Marks	Total Marks
		Lecture	Tutorial	Practical/ Practice				
Course-IV(f): Digital Archive Management System	4	3	1	0	60 Hours	25	75	100

Course Outcomes:

Upon successful completion of this course, scholars will be able to gain comprehensive knowledge of archival concepts, organization, preservation, and management practices in both traditional and digital environments. In addition, they will gain proficiency in archival description standards, digital preservation strategies, and disaster management. Further, this course will help them to develop professional competencies in archival administration, ethical practices, access services, and the application of emerging technologies for preserving documentary heritage and cultural memory.

Unit-1: Foundation of Archives

- Nature, scope, and objectives of archives
- Evolution and history of archives
- Types of archives
- Role of archives in research, governance, culture, and heritage preservation
- National and international archival organizations and initiatives

Unit-2: Organization and Administration of Archival Records

- Acquisition, accessioning, appraisal, and retention scheduling
- Archival cataloguing, indexing, and finding aids
- Standards for archival description (ISAD(G), Dublin Core, MARC, EAD)
- Archival administration and management
- Policies for access, use, and security of archives
- Human resource management in archives

Unit-3: Preservation, Conservation, and Digital Archives

- Preservation and conservation of archival materials
- Preventive and curative conservation techniques
- Environmental control and disaster management in archives
- Digitization of archives: methods, tools, and workflows
- Digital preservation strategies
- Institutional repositories and open archival systems
- Emerging technologies in archival management: AI, cloud storage, etc.

Unit-4: Archival Ethics and Services

- Archival policies
- Intellectual property rights, privacy, and confidentiality
- Ethics in archival management
- Services and user studies in archives
- Community archives and indigenous knowledge preservation
- Case studies of major archives: National and International

Essential Readings:

- APPELBAUM (B). *Preserve, Protect and Defend: A Practical Guide to the Care of Collections*. Barbara Appelbaum. 2018.
- BAIRD (BJ). *Practical Preservation and Conservation Strategies for Libraries*. Rowman & Littlefield Publishers. 2018.
- BOUNTOURI (L). *Archives in the digital age: Standards, policies and tools*. Chandos Publishing. 2017.
- CORRADO (EM) AND SANDY (HM). *Digital Preservation for Libraries, Archives, and Museums*. Rowman & Littlefield Publishers. 2017.
- MILLAR (LA). *Archives: Principles and Practices*. Neal Schuman Pub. 2017.
- PRAJAPATI (C). *Conservation of Documents: Problems and Solutions*. Mittal Publications. 2005.
- PURCELL (AD). *The Digital Archives Handbook: A guide to creation, management, and preservation*. USA, Bloomsbury Publishing USA. 2019.
- SESHAN (R). *Archives and archiving in the 21st century*. Routledge. 2024.

Suggested Readings:

- BALLOFFET (N) and REED (JA). *Preservation and conservation for libraries and archives*. American Library Association. 2005.
- COOK(M). *The management of information from archives*. Routledge. 1999.
- COOK(MJ). *Archives and the Computers*. Butterworth-Heinemann. 2014.
- HUNTER (GS). *Developing and Maintaining Practical Archives: A How To Do It Manual for Librarians (How-To-Do-It Manuals)*. American Library Association. 2015.
- LEGGETT (ER). *Digitization and digital archiving: A practical guide for librarians*. Bloomsbury Publishing PLC. 2020.



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